

Untangling the intertwined relationships of problematic eating behaviours, psychopathology, and body image shame after metabolic and bariatric surgery

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Disordered eating behaviors and bariatric surgery outcomes

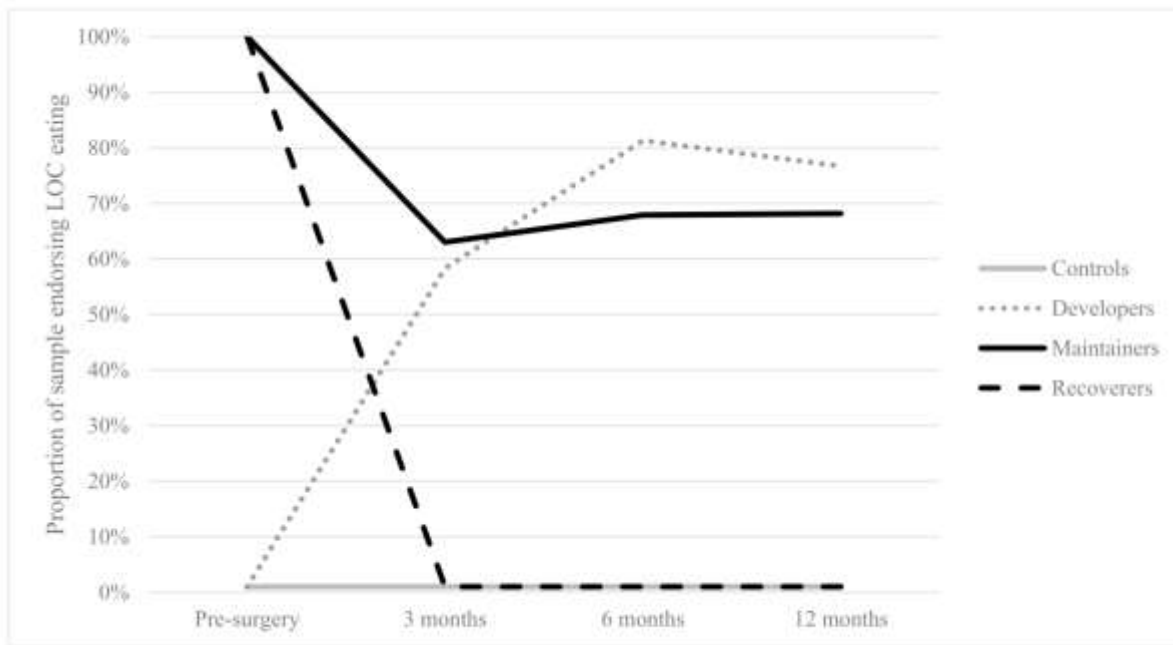
Walid El Ansari^{1,2,3}  · Wahiba Elhag⁴

OBES SURG (2021) 31:1755–1766

Table 2 Summary of causes, predictors, and prevention and management strategies of WR and IWL after BS

Characteristic	Summary
Causes	
Hormonal/metabolic	Increase in ghrelin, decrease in peptide YY and GLP-1, post-bariatric hypoglycemia, role of leptin is unclear [24, 40–49]
Dietary non-adherence	Increase caloric intake with time, dietary non-adherence/food indiscretion, grazing, lack of nutritional follow-up [13, 32, 50–56]
Physical inactivity	Non-compliance, sedentary behavior, presence of barriers to exercise [51, 57–61]
Mental health	Depression, multiple psychiatric conditions, binge eating disorder, loss of control over eating [54, 62–68]
Anatomic surgical failure	
LAGB	Pouch distension [69]
LSG	Dilatation of gastric pouch [70–77]
RYGB	Dilatation of gastric pouch, dilatation of gastrojejunostomy stoma outlet, gastrogastic fistula [73–75]

Disordered eating behaviors and bariatric surgery outcomes



Smith et al, 2023, *Obes Surg*

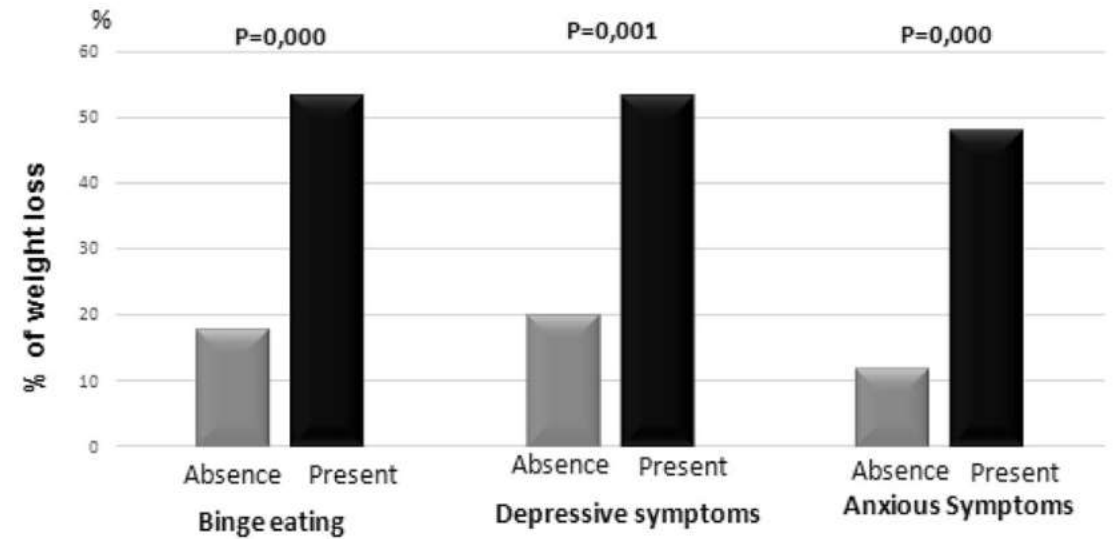


Fig. 3 Percentage of weight regain $\geq 20\%$ according to the presence or absence of psychiatric disorders after bariatric surgery in the long-term evaluation

Freire, et al, 2021, *Eat Weight Disord*

Body Image after bariatric surgery

In bariatric surgery patients, concerns about body image:

- loss of eating control and compulsive eating;
- depressive symptoms, other psychiatric symptoms, and suicidality;
- greater functional inability due to excess skin;
- experiences of social discrimination and bullying;
- increased BMI, and lower percent excess weight loss.

Bertoletti et al, 2019, Bar Surg Pract Pat Care; Ivezaj et al, 2018, Obes Rev; Geller et al, 2020, Nutrients

Multifaceted construct



The Role of Body Image and Psychopathology

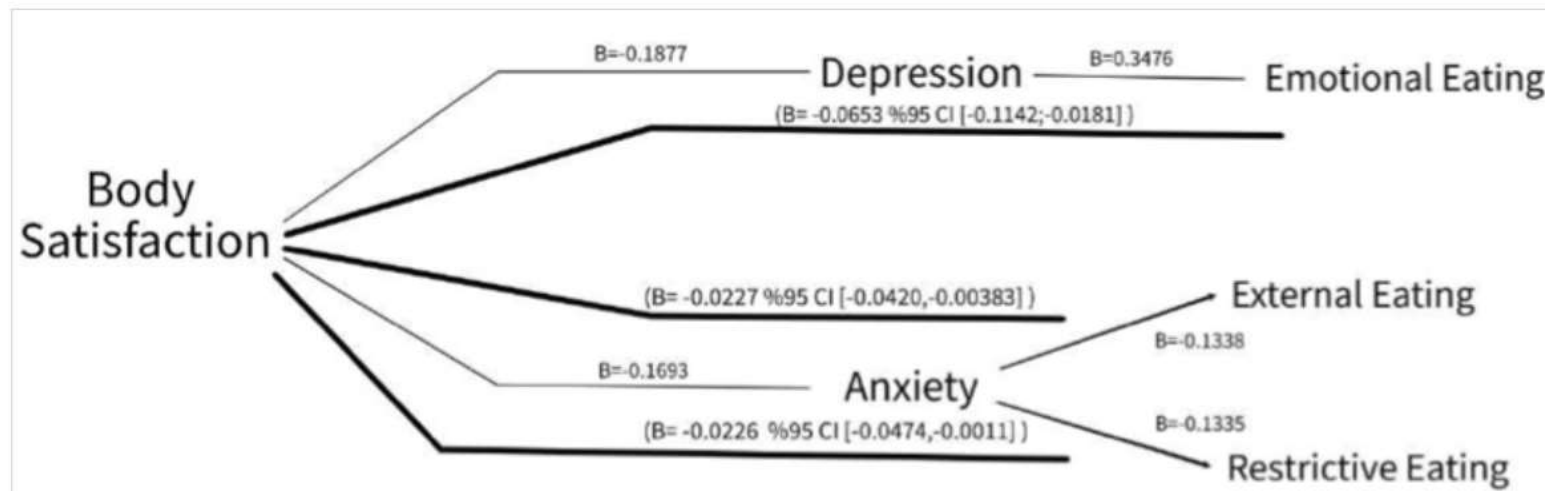


Figure 2. Anxiety and depression as mediators of the association between body satisfaction, external eating, restrictive eating and emotional eating.

The Special Case of Body Shame

Shame is an unwanted universal human emotion that emerges in the social context when the self perceives that others evaluate him/her as weak, unattractive, inferior, and/or defective, and at risk of criticism, judgment, or rejection (*Gilbert and Andrews (1998)*)



Excessive hanging skin

Weight regain

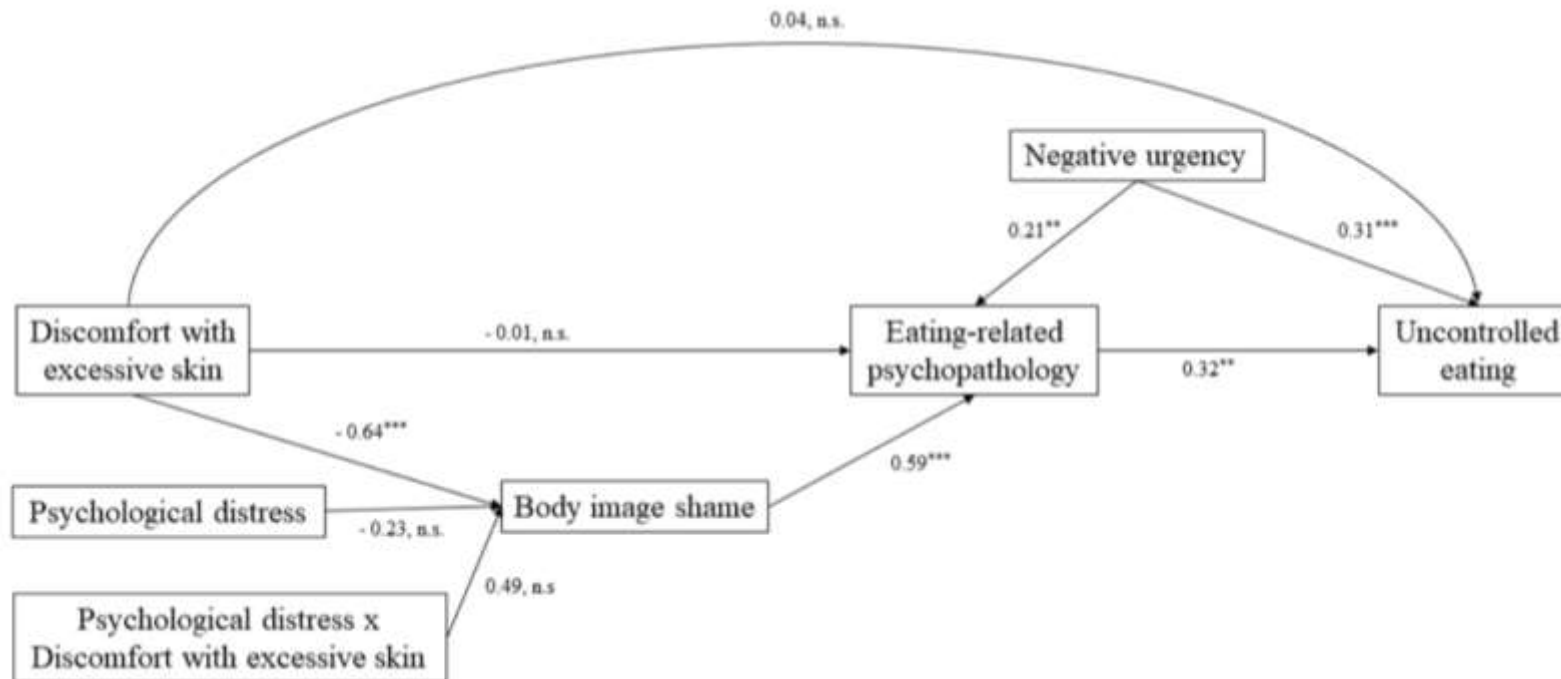
BCS scars

Body Image Shame

- Inappropriate weight control strategies
- Problematic eating behaviors to deal with the negative feelings from these experiences

(Klassen et al., 2018; Duarte et al., 2017)

The intertwined relationship between BI, PEBs and psychopathology



J. Clin. Med. 2021, 10, 2967. <https://doi.org/10.3390/jcm10132967>

De Lourdes et al (2021)

Body image and weight Stigma

Weight bias refers to “negative weight-related attitudes, beliefs, assumptions, and judgments toward individuals who are overweight and obese”



Stigmatizing attitudes
(Weight stigma)



Internalization of weight bias

Bariatric Surgery Patients’ Perceptions of Weight-Related Stigma in Healthcare Settings Impair Post-surgery Dietary Adherence

Danielle M. Raves¹, Alexandra Brewis^{2}, Sarah Trainer¹, Seung-Yong Han¹ and Amber Wutich²*

Frontiers in Psychology | October 2016 | Volume 7 | Article 1497

Internalized weight bias predicts worse dietary adherence, disordered eating, and weight loss.

BMI change had no effect on internalized weight bias.

Concurrent BMI was associated with increased perception of general and shealth-care weight – related stigma.

Body image and weight bias

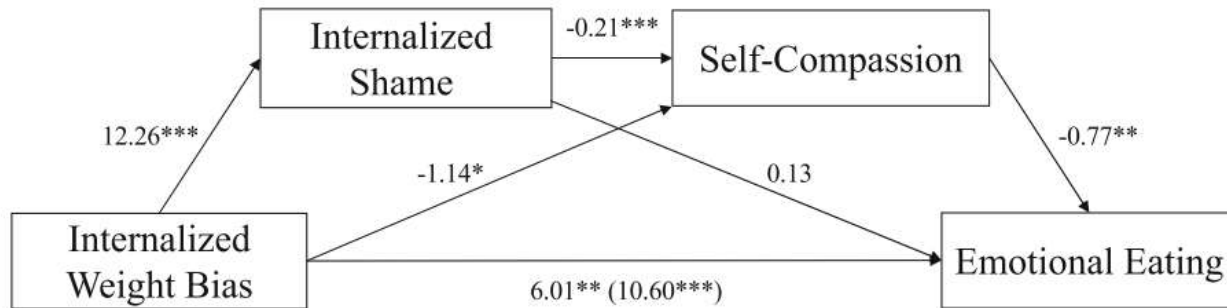


Fig. 1 Emotional eating PROCESS path model summary and unstandardized indirect effects. * $p < .05$, ** $p < .01$, *** $p < .001$

Braum et al, 2021, Obes Surg; 31:3177–3187

(I)WB was positively associated

- Body dissatisfaction;
- Poor dietary adherence; poorer supplement adherence;
- Restrained, emotional and external eating, loss of control eating, eating disorder psychopathology;
- Depression, and anxiety, and poorer quality of life.
- Shape and weight over-valuation; worse body image.

(Bennett, 2022, Obes Rev; Himmelstein, et al, 2022, Frontiers in Endocrinology,)

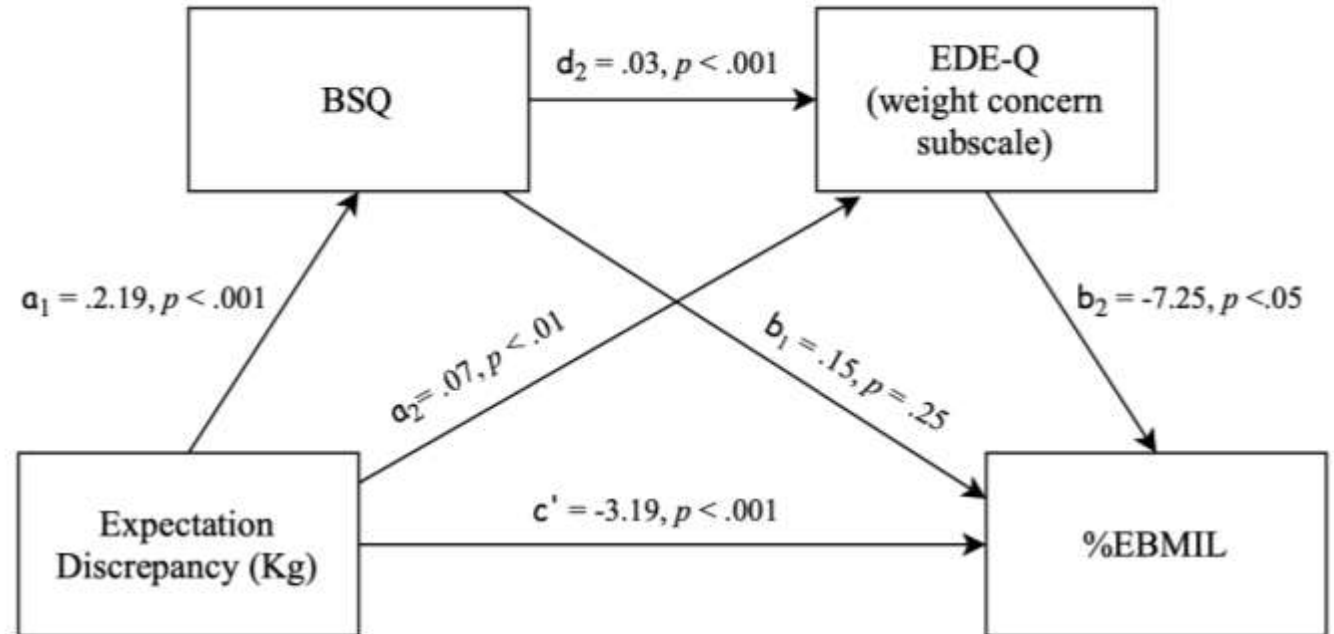
Weight Loss Expectations

Weight loss expectations and weight loss after surgery: the mediating role of body image and weight concerns

Eva M. Conceição Ph.D., Marta de Lourdes M.Sc., Leonor Moreira M.Sc.,
Ana Pinto-Bastos Ph.D., Sílvia Félix M.Sc.

Surgery for Obesity and Related Diseases

Volume 16, Issue 7, July 2020, Pages 932-939

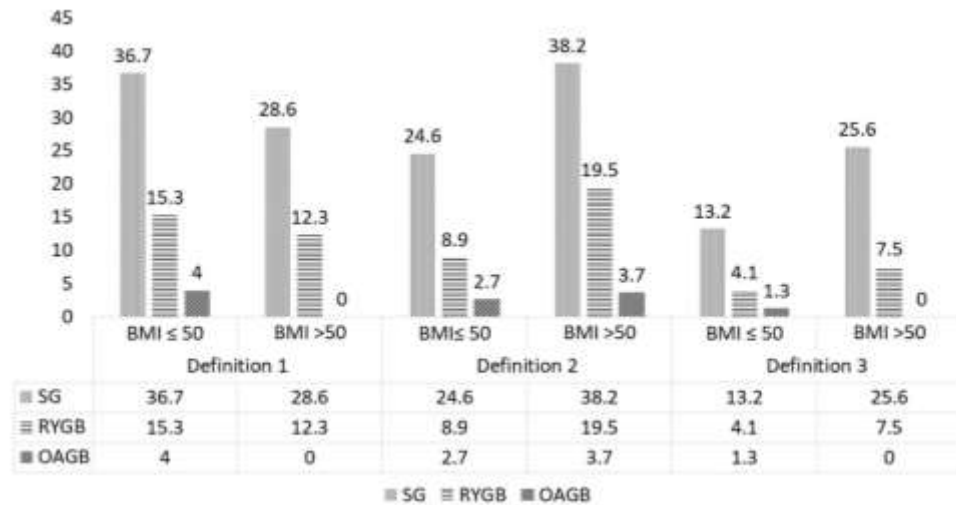


Total effect, $c' = -3.2, p < .001$; Direct effect, $b = -2.53, p < .01$
Indirect effect: $\alpha_1 b_1$: [-.07, 1.5]; $\alpha_2 b_2$: [-1.4, -.06]; $\alpha_1 d_2 b_2$: [-1.4, .10]

Weight regain and weight bias

Weight Regain After Bariatric Surgery—A Multicentre Study of 9617 Patients from Indian Bariatric Surgery Outcome Reporting Group

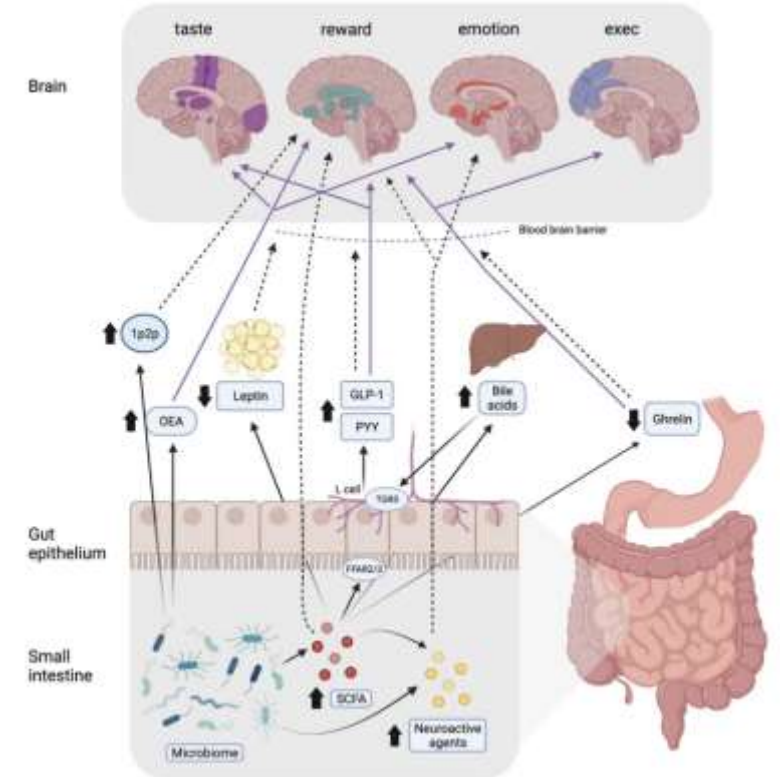
Sarfaraz J. Baig¹ · Pallawi Priya¹ · Kamal K. Mahawar² · Sumeet Shah³ · for the Indian Bariatric Surgery Outcome Reporting (IBSOR) Group



Weight regain is perceived as stressful, shameful, and frustrating. Patients expressed hopelessness and discouragement. (Tolvanen, 2021, 2022)

Gut-brain mechanisms underlying changes in disordered eating behaviour after bariatric surgery: a review

Eva Guerrero-Hreins^{1,2} · Claire J. Foldi^{3,4} · Brian J. Oldfield^{3,4} · Aneta Stefanidis^{3,4} · Priya Sumithran^{3,4} · Robyn M. Brown^{1,3}



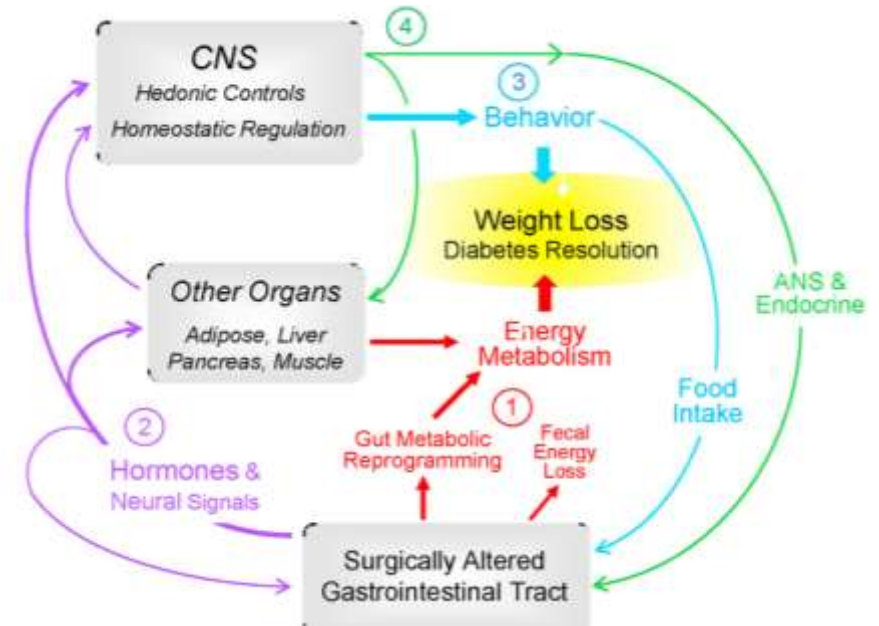
Reviews in Endocrine and Metabolic Disorders
<https://doi.org/10.1007/s1154-021-0966-4>

Stigma and Shame after bariatric surgery



Regulation of body weight: Lessons learned from bariatric surgery



Vance L. Albaugh¹, Yanlin He², Heike Münzberg³, Christopher D. Morrison³, Sangho Yu³, Hans-Rudolf Berthoud^{3,*}



MOLECULAR METABOLISM 68 (2023) 101517

Stigma, shame and access to treatment

Role of weight bias and patient–physician communication in the underutilization of bariatric surgery

David B. Sarwer Ph.D.^{a b}  , Hamlet Gasoyan Ph.D., M.P.H.^c,
Sarah Bauerle Bass Ph.D., M.P.H.^b, Jacqueline C. Spitzer M.S.Ed.^a, Rohit Soans M.D.^{d e},
Daniel J. Rubin M.D., M.Sc., F.A.C.E.^{d f}

Surgery for Obesity and Related Diseases
Volume 17, Issue 11, November 2021, Pages 1926-1932



Contributes to the **underutilization of bariatric surgery**.

This bias also appears to influence the interactions that patients and providers have about obesity and its surgical treatment.



An update on research examining the implications of stigma for access to and utilization of bariatric surgery

Sean M. Phelan Volume 25 • Number 5 • October 2018

There is evidence that patients avoid healthcare appointments as a result of shame and self-blame due to weight regain.

Interventions to reduce internalized weight bias (ACT-based interventions; self-compassion focused)

Legislation preventing discrimination, training, regulations for accessible healthcare, discontinuation of stigmatizing images and content in the media.

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Thank You!
Obrigada!
Grazie!

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